USDA Service Center Initiative Geospatial Data Acquisition, Integration and Delivery Business Re-engineering Project

Data Themes - Outline - Demographics

I. Acquisition

A. Data Source

- 1. Producer Information
 - a. Name

U.S. Department of Commerce Bureau of the Census Geography Division

b. Location of Headquarters

Washington, DC

c. Internet Address

http://www.census.gov/geo/www/tiger/index.html

2. Publisher Information

a. Name

Environmental Systems Research Institute

b. Location of Headquarters

ESRI 380 New York Street Redlands, CA 92373-8100 USA

c. Internet Address

http://www.esri.com/

3. Acquisition Information

a. Delivery Media

Ftp download ArcData Online

b. Download URL

http://www.esri.com/data/online/index.html

c. Projected Data Availability Schedule

Now

B. Standards Information

1. Geospatial Data Standard

a. Standard Name and Steward Information

Tiger/Line Census Files

b. Standard Version

Version (0024)

c. Standard URL

http://www.census.com/geo/www/tiger/index.html

2. Metadata Standard

a. Standard Name and Steward Information

FGDC Content standards for Digital Geospatial Metadata

b. Description of Metadata Captured

Metadata Sections include:

Identification Information
Data Quality Information
Spatial Data Organization Information
Spatial Reference Information
Entity and Attribute Information
Distribution Information
Metadata Reference Information

c. Metadata Accuracy and Completeness Assessment

Complete

C. Acquired Data Structure

- 1. Geospatial Data Format
 - a. Format (raster, vector, etc.)

Vector

b. Format Name

ESRI Shape files

c. Data Extent

US

- d. Horizontal and Vertical Resolution
- e. Absolute Horizontal and Vertical Accuracy

The information present in these files is provided for the purposes of statistical analysis and census operations only. Coordinates in the TIGER/Line files have six implied decimal places, but the positional accuracy of these coordinates is not as great as the six decimal places suggest. The positional accuracy varies with the source materials used, but generally the information is no better than the established National Map Accuracy standards for 1:100,000-scale maps from the U.S. Geological Survey (USGS); thus it is NOT suitable for high-precision measurement applications such as engineering problems, property transfers, or other uses that might require highly accurate measurements of the earth's surface. The USGS 1:100,000-scale maps meet national map accuracy standards and use coordinates defined by the North American Datum, 1983.

f. Nominal Scale

1:100,000

g. Horizontal and Vertical Datum

North American Datum 83 (NAD83)

h. Projection

Geographic

i. Coordinate Units

Decimal Degrees

j. Average Data Set Size

500K

k. Symbology

None

2. Attribute Data Format.

a. Format Name

Fixed Format ASCII

b. Database Size

Varies

Data Model

a. Geospatial Data Structure

ESRI Shape File

b. Attribute Data Structure

Dbase 5

c. Database Table Definition

None

d. Data Relationship Definition

The Shape files contain listings of fips, and mcd.

e. Data Dictionary

Census Demographics Data Dictionary

This data table is an extract from the complete Summary Tape Files 1A and 3A, reflecting the most commonly used demographic characteristics. It is theoretically available for all summary levels except Census Blocks. Except where otherwise noted, all fields represent absolute counts of persons or housing units as they fall within particular categories. For example, persons can be counted according to ethnicity, and housing units can be grouped according to the number of rooms in the unit. To determine the percent of persons or housing units that fall within a category relative to a larger group, simply divide by the appropriate universe field. (i.e., Percent Hispanic = Hispanics / Total Population). We have pre-calculated percentages for many of the fields in the database for quick display purposes. These new fields have a prefix of "P_" (i.e. Percent Hispanic would be named "P_Hispanic" in the database.

Population Characteristics

Total Population

Persons Total Population
Families Total Families
Houshold Total Households
Samp_pop Sample Population

Per samp Percent of Persons in Sample

Sex

Male Male Female Females

Ethnicity

White Whites Blacks

Amind American Indians Asian Asian and Pacific O_ethnic Other Ethnicity

Hispanic Hispanics of All Races

Age

Agelt 05 Age Less Than 5

Age05_09 Age 5 to 9 Age10 14 Age 10 to 14

Age15_17 Age 15 to 17

Age18_19 Age 18 to 19

Age 15_19 Age 15 to 19

Ageis_20 Age 20 Years

Age21_24 Age 21 to 24

Age20_24 Age 20 to 24

Age25_34 Age 25 to 34

Age 35_44 Age 35 to 44

Age45_54 Age 45 to 54

Age55_64 Age 55 to 64 Age65_74 Age 65 to 74 Age75_84 Age 75 to 84 Agegt_84 Age Over 84 Agege_03 Age 3 or Older Age 5 or Older Agege_05 Age 16 or Older Agege_16 Agege_25 Age 25 or Older

Marital Status

Single Never Married Married Married

Separate Married and Separated

Widowed Divorced Divorced

Family Type

Oneperhh One Person Households
Marrwich Married with Child Families
Marrnoch Married no Child Families
Singwich Single with Child Families
Single no Child Families

Persons in Families Perinfam In Families

Persons in Institutions

Corrinst In Correctional Facilities
Nurshome In Nursing Ho mes
Mental In Mental Institutions
Juvenile In Juvenile Detention
O_instit In Other Institutions

O_noinst In Other Non-Institutional Group Quarters

Dormitor In Dormitories
Miliquar In Military Quarters
Shelters In Homeless Shelters

Instreet On the Street

Ability to Speak English

Onlyengl Speak English Only Ableengl Able to Speak English Cantengl Cannot Speak English

Citizenship

Native Native Citizens
Natural Naturalized Citizens
Noncitiz Non Citizens

Region of Birth

Born_ins Born in Same State
Bornnort Born in Northeast USA
Bornsout Born in Midwest USA
Bornsout Born in South USA
Bornwest Born in West USA
Born_for Born Outside USA

Migratory Status

Samehous At Same House 1985
Samecnty In Same County 1985
Samestat In Same State 1985
Oth_stat In Other State 1985
Frm_abrd In Other Country 1985

Workers

Workers Total Workers Over 16

Place of Work

Wrkincty Worked in County of Residence
Wrkexcty Worked outside County of Residence

Type of Commute

Drvalone Drove Alone to Work
Carpool Carpooled to Work
Pubtrans Public Transit to Work
Wrk home Worked at Home

Duration of Commute

Com_lt15 Commute Under 15 Min Com_1529 Commute 15 to 29 Min Com_3044 Commute 30 to 44 Min Com_gt44 Commute Over 44 Min

Student Population

Preprima Preprimary Students
Elemscnd Elem and High Students
College Students

Educational Attainment

Nodiplom No High School Diploma Highschl High School Graduates Somecolg Attended College Colggrad College Graduates

Gradschl Attended Graduate School

Employment Status

Armdforc In Armed Forces
Employed Total Employed
Unemploy Total Unemployed
Notinwrk Total Not in Workforce

Industry of Employment

Primary In Primary Industries Manufact In Manufacturing

Utility In Transport and Utilities

Trade In Trade

Fire In Finance and Insurance Services In Commercial Services Profserv In Professional Services Public In Public Administration

Occupation

Execprof As Managers and Professionals

Techsale As Technical-Sales-Clerical Service As Service Employee

Manual As Operator-Assembler-Laborer

Employment Sector

Privwork In Private Sector
Publwork In Public Sector
Selfwork Self Employed
Famiwork Unpaid Family Work

Household Income

Inc_lt15 Income Under \$15,000 in Household Inc_1525 Income \$15-25,000 in Household Inc_2535 Income \$25-35,000 in Household Inc_3550 Income \$35-50,000 in Household Inc_5075 Income \$50-75,000 in Household Inc_gt75 Income Over \$75,000 in Household Inc_medn Median Household Income

Inc_aggr Aggregate Household Income

Households by Type of Income

Wage_sal Wages or Salary in Household Self_inc Self Employed Income in Household

Farm_inc Farm Income in Household Inte_inc Interest Income in Household Socs_inc Social Security in Household Publ_inc Public Assistance in Household Reti_inc Retirement Income in Household

Per Capita Income

Incprcap Per Capita Income

Poverty

Childpov Children in Poverty Inpovrty Persons in Poverty

Housing Characteristics

Housing Units

Housing Units

Occupancy

Occupied Units
Vacant Units

Tenure

Ownr_occ Owner Occupied Units Rent_occ Renter Occupied Units

Occasional Units

Seasonal Use Units
F_migrnt Migratory Worker Units

Rooms in Unit

Room_1_3 Units with 1 to 3 Rooms Room_4_6 Units with 4 to 6 Rooms Room_gt6 Units with Over 6 Rooms

Persons in Unit

Prunit12 Units with 1 to 2 Persons
Prunit34 Units with 3 to 4 Persons
Prunitg4 Units with Over 4 Persons

Housing Value

Units Valued Under \$25,000 Val_lt25 Val_2550 Units Valued \$25-50,000 Val_501c Units Valued \$50-100,000 Units Valued \$100-200,000 Val 1c2c val 2c3c Units Valued \$200-300,000 Val gt3c Units Valued Over \$300,000 Val medi Median Value of Units Agg_valu Aggregate Value of Units

Housing Contract Rent

Rnt_lt25 Unit Rent Under \$250 Rnt_2550 Unit Rent \$250-500 Rnt_5075 Unit Rent \$500-750 Rnt_751k Unit Rent \$750-1000 Rnt_gt1k Unit Rent Over \$1000

Rnt_medi Median Rent

Units in Structure

Detached Single Detached Units
Attached Single Attached Units
Duplex Duplex Units
Apartment Units

Source of Water

Pubwater Water from Public Source Prywater Water from Private Source

Type of Sewer

Pubsewer Sewer with Public Utility Prvsewer Sewer by Private Means

Age of Housing Units

Bltbfr70 Built before 1970 Blt_7079 Built 1970-1979 Blt_8084 Built 1980-1984 Bltaft84 Built after 1984 Medyrblt Median Year Built

Source of Heat

Publ_gas Heat from Gas Utility
Botl_gas Heat from Bottled Gas
Electric Heat from Electricity
Fuelkero Heat from Oil or Kerosene
Coalwood Oth_heat Heat from Other Source

Vehicles in Household

Novehicl No Vehicles in Household Vehicl_1 One Vehicle in Household

Vehicl_2 Two Vehicles in Household Vehiclg2 Over Two Vehicles in Household Aggregate Vehicles

D. Policies

1. Restrictions

a. Use Constraints

None. Acknowledgment of the U.S. Bureau of the Census would be appreciated for products derived from these files. TIGER, TIGER/Line, and Census TIGER are trademarks of the Bureau of the Census.

b. Access Constraints

None

c. Certification Issues

None

2. Maintenance

a. Temporal Information

TIGER/Line files are extracted from the Census TIGER data base when needed for geographic programs required to support the census and survey programs of the Census Bureau. No changes or updates will be made to the 1995 TIGER/Line files. Future releases of TIGER/Line files will reflect updates made to the Census TIGER data base and will be released under a revised version numbering system (based on the month and year the data is extracted).

b. Average Update Cycle

None

E. Acquisition Cost

1. Cooperative Agreement

a. Description of Agreement

See License Agreement at: http://www.esri.com/data/online/datalicense.html

b. Status of Agreement

Current

2. Cost to Acquire Data

If acquired from the ESRI Web site as shapefiles the data is free.

II. Integration

A. Value Added Process

1. Benefit to the Service Center

N/A

2. Process Model

a. Flow Diagram

N/A

b. Process Description.

The data was downloaded in Zip format as a shapefile in geographic projection DD The data was projected to UTM NAD83 using ESRI's ArcView projector extension.

3. Technical Issues

a. Tiling

County

b. Compression

None

c. Scale

1:100,000

d. Tonal Matching

None

e. Edge-matching

None

4. Quality Control

a. Procedures

None

b. Acceptance Criteria

None

5. Data Steward.

a. Name and Organization

Original Data steward will remain:

U.S. Department of Commerce Bureau of the Census Geography Division

USDA Service Center data is located at: National Cartography and Geospatial Center USDA-NRCS Ft Worth TX

b. Responsibilities

None

B. Integrated Data Structure

1. Geospatial Data Format

a. Format (raster, vector, etc.)

Vector

b. Format Name

ESRI Shapefiles

c. Data Extent

United States

d. Horizontal and Vertical Resolution

Same as Source

e. Absolute Horizontal and Vertical Accuracy

Same as Source

f. Nominal Scale

1:100,000

g. Horizontal and Vertical Datum

Same as Source

h. Projection

UTM NAD83

i. Coordinate Units

Meters

j. Symbology

None

2. Attribute Data Format

a. Format Name

Dbase5

b. Database Size

Variable

3. Data Model

a. Geospatial Data Structure

Same as Source

b. Attribute Data Structure

Same as Source

c. Database Table Definition

Same as Source

d. Data Relationship Definition

Same as Source

e. Data Dictionary

Same as Source

C. Resource Requirements

1. Hardware and Software

Hardware: Desktop computer Pentium class with 32meg of Ram Software: ESRI Software or any common GIS desktop software

2. Staffing

Unknown

D. Integration Cost

1. Hardware and Software

Hardware: Desktop computer Pentium class with 32meg of Ram Software: ESRI Software or any common GIS desktop software

2. Staffing

Unknown

III. Delivery

A. Specifications

1. Directory Structure

a. Folder Theme Data is Stored In

Demographics

2. File Naming Convention

a. List of Theme Files and The File Naming Convention

Each data file name includes a 3-letter prefix (e.g. 'blk') followed by a 5-digit County FIPS Code (e.g. '53001') and the file extension (e.g. '.zip' or '.shp'). For example, the compressed street data layer for Cook County, Illinois would be named 'str17031.zip'. Below is a list of the prefixes for each of the TIGER data layers.

D. I. D:	D C
Data Layer Description	Prefix
Census Blocks	blk
Coastal Shoreline	shr
Coastal Water	cst
Congressional Districts	cd4
County (1995 Boundaries)	cty
County (1990 Boundaries)	c90
Census Transportation Planning	ct
Package Areas	
Census Block Groups	grp
American Indian Reservations	ind
Key Geographic Locations	kgl
Land and Water Outlines	wat
Landmark Areas	lan
Minor Civil Divisions (1990)	m90
Minor Civil Divisions (1995)	mcd
Places (1990)	p90
Places (1995)	pla
Unified School Districts	sdu
Elementary School Districts	sde
Secondary School Districts	sds
Middle School Districts	sdm
Traffic Analysis Zones	taz
Census Tracts	trt
Urban Areas	uar
Urban and Rural Outlines	urb
Voting Districts (1990)	vtd
Water Bodies	wbd
Lines-Ridge Lines and Fences	lne
Lines-Railroads	lnb
Lines-Utility Lines	lnc
Lines-Landmark	lnd
Lines-Streams	stn
Maintenance and Updating	lnh
Procedures Overview	11111
Lines-Streets	str
Lines-Unclassified	lnx
Points-Landmark	ltp
1990 Census Block	b90
Demographics	030
1990 Census Block Group	g90
Demographics	830
1990 Census Tract Demographics	t90
Alternate Street Names	
Antennate Street Names	stn

B. User Information

1. Accuracy Assessment

a. Alignment with Other Theme Geospatial Data

Data will align 100% with other tiger data but will not align with data at a scale of better than 1:100,000

b. Content

Tiger/Line Census data

2. Appropriate Uses of the Geospatial Data

a. Display Scale

Original data source 1:100,000

b. Plot Scale

Original data source 1:100,000

c. Area Calculations

Accurate only to source scale

d. Decision Making

None

C. Maintenance and Updating

- 1. Recommendations and Guidelines
 - a. Frequency of Updates

Update data when Census releases new Tiger files

b. Location for the Theme Data to be Maintained

US Census Bureau
Data for USDA Service Centers will be maintained at NCG
Ft. Worth TX

c. Maintenance and Updating Procedure Overview

Update when Census releases new Tiger files.